



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,001	03/29/2006	Takashi Kenmoku	03500.103895.	4088

5514 7590 09/24/2008
FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

FANG, SHANE

ART UNIT	PAPER NUMBER
----------	--------------

4131

MAIL DATE	DELIVERY MODE
-----------	---------------

09/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/574,001		KENMOKU ET AL.	
	Examiner		Art Unit	
	SHANE FANG		4131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1 and 5 drawn to copolymer of a chemically modifying polyhydroxyalkanoate comprised of at least a unit represented by a chemical formula (1);

Group II, claim(s) 2 and 5 drawn to copolymer of a chemically modifying polyhydroxyalkanoate comprised of at least a unit represented by chemical formula (1), (2), (3), (4A), or (4B);

Group III, claim(s) 3 and 5, drawn to a chemically modifying polyhydroxyalkanoate comprised of at least a unit represented by a chemical formula (5);

Group IV, claim(s) 4 and 5, drawn to a chemically modifying polyhydroxyalkanoate comprised of at least a unit represented by a chemical formula (6);

Group V, claim(s) 6 and 12, drawn to a method for producing polyhydroxyalkanoate represented by a chemical formula (9), comprised of a step of polymerizing a compound represented by a chemical formula (8);

Group VI, claim 7, drawn to a method for producing polyhydroxyalkanoate represented by a chemical formula (13);

Group VII, claim(s) 8 and 13, drawn to a method for producing polyhydroxyalkanoate represented by a chemical formula (15), comprised of a step of polymerizing a compound represented by a chemical formula (14);

Group VIII, claim 9, drawn to a method for producing polyhydroxyalkanoate represented by a chemical formula (17);

Group IX, claim 10, drawn to a method for producing polyhydroxyalkanoate represented by a chemical formula (19);

Group X, claim 11, drawn to a method for producing polyhydroxyalkanoate represented by a chemical formula (20);

Group XI, claim 14, drawn to a method for producing polyhydroxyalkanoate represented by a chemical formula (170); and

Group XII, claim 15, drawn to a method for producing polyhydroxyalkanoate represented by a chemical formula (172).

The inventions listed as Groups I-XII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the common technical feature in all groups is the modifying polyhydroxyalkanoate having modified reactive groups on the side chain and producing methods. This element cannot be a special technical feature under PCT Rule 13.2 because the element is shown in the prior art. US Patent 6,083,729 (Claim 4) discloses a polyhydroxyalkanoate prepared from the same components as claimed by applicants except for the particular inclusion of the Sulfur unit in the chain as claimed. It would have been obvious to one having

ordinary skill in the art at the time the invention was made to employ particular amounts and/or parameters as known in the art, since when chemical compounds have "very close" structural similarities and similar utilities, without more a prima facie case may be made, i.e., obviousness may be based solely upon structural similarity (an established structural relationship between a prior art compound and the claimed compound, as with homologs). See *In re Wilder*, 563 F.2d 457,460,195 (CCPA 1977). See *In re Deuel*, 51 F.3d 1552 (Fed. Cir.1995). The necessary motivation to make the claimed compound, and thus the prima facie case of obviousness, arises from the reasonable expectation that compounds similar in structure will have similar properties. *In re Gyurik*, 596 F.2d 1012, 1018 (CCPA 1979). See MPEP § 2144.08,09, §2163, §2143.

Affirmation of this election must be made by applicant in replying to this office action. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANE FANG whose telephone number is (571)270-7378. The examiner can normally be reached on Mon.-Thurs. 8 a.m. to 6:30 p.m. EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (271)272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/
Supervisory Patent Examiner
Art Unit 4131

s.f.